

near its great bend below Yü-mên-hsien, sends a portion of its drainage, though only a very small one, eastwards into the terminal basin of Hua-hai-tzū.⁷

Whether the basin into which the old northern beds of the Su-lo-ho disembogued and the terminal basin fed by the present bed to the south received surface drainage simultaneously is a question upon which, in view of the limitations of the available evidence and without the guidance of expert knowledge, I do not feel competent to express an opinion. But what, I believe, can be asserted with confidence is that the ground surveyed between the outflow of the old northern beds and the belt of high sands east of Bēsh-toghrak exhibits surface features unmistakably pointing to its being an ancient lacustrine basin.

I refer to those belts of high eroded terraces and ridges which extend over so great a portion of it. To whatever geological epoch expert examination may hereafter assign the successive sedimentary deposits from which they have been carved out, or the commencement of the process of erosion, carried on now solely by the winds but probably once aided also by water action, it is certain that these Mesa clusters have their exact counterpart in those of other dried-up basins of undoubtedly lacustrine character situated within the same region. We find them not only in parts of the great basin once covered by the ancient Lop sea, from the north-east of Lou-lan to beyond Kum-kuduk,⁸ but also wherever the lower Su-lo-ho bed widens out into lacustrine basins, like that occupied by the Khara-nōr lake or those now filled partly by marshes to the north and south-west of the Tun-huang Limes.⁹ It is significant that the several lacustrine basins at the termination of the river of Hāmi, all found dry in November, 1914, have also similar belts of erosion terraces in their vicinity.¹⁰ We are therefore justified in looking upon Mesa formations of this kind, wherever we meet them in the great drainageless zone between T'ien-shan and K'un-lun, as proof of an old lake-bed wholly or partially dried up and undergoing wind-erosion.

Ancient
lacustrine
basin
proved by
Mesa rows.

That the old lacustrine basin east of Bēsh-toghrak must have received its main supply of water from the Su-lo-ho is made quite certain by the topographical facts ascertained in the course of our surveys, especially with regard to the dry river-beds leading in its direction. Neither from the utterly barren Pei-shan, worn down into a succession of low ranges and plateaus, nor from the slopes in the south, covered with high ridges of dunes, could a surface flow of water ever have reached it sufficiently large to account for the extent of the basin. On this account it seems safe to assume also that the abundant subsoil moisture found in the depressions of the open central and western portions of the basin is derived from the Su-lo-ho.

Moisture in
old lacus-
trine basin.

Judging from such observations as I was able to make, it appears to me far more probable that this supply now reaches the depressions by percolation than that it could be due to occasional inundation at the time of summer floods. The formation of temporary sheets of fresh water in those portions of the old lacustrine basin which in March, 1914, we found covered with moist sand and free from salt-incrustation, can fully be accounted for by the subterranean drainage of water from the old beds of the Su-lo-ho delta which had sunk through their gravel bottom to impermeable strata below; for the basin lies undoubtedly lower than those beds. Moreover the distance separating it from them and from the present course of the Su-lo-ho is small, indeed, when compared, e. g., with that which intervenes between the termination of the small streams that lose themselves on the gravel Sai north and west of Nan-hu (Maps No. 36. D. 1; 39. A. 1) and the marshy springs

Moisture
derived
from
Su-lo-ho.

⁷ See Map No. 40. C. D. 5; *Memoir on Maps*, p. 98; below, pp. 386 sqq.

⁸ See above, pp. 291 sqq., 317 sq.

⁹ See Map No. 38. A. 4; B. C. 3, 4; *Serindia*, ii. pp. 575 sqq., 589, 641 sq., 697, 717. The configuration of these Mesa

clusters near the lower Su-lo-ho and their relation to plateau tongues cut out by water action can be studied more clearly in the 'Detailed Map of the ancient Chinese Limes', forming Pl. 33 of *Serindia*, iii.

¹⁰ See Maps Nos. 31. D. 3; 34. A. 3.